REMARKS

The Office Action dated January 4, 2005, has been carefully reviewed and the foregoing amendment and the following remarks have been made in consequence thereof.

Claims 1-20 are pending in this application. Claims 7-20 stand rejected. Claims 1-5 have been withdrawn from consideration. Claims 7, 12, 13, 16, 17, and 20 have been amended herein.

In accordance with 37 C.F.R. 1.136(a), a one-month extension of time is submitted herewith to extend the due date of the response to the Office Action dated January 4, 2005 for the above-identified patent application from April 4, 2005 through and including May 4, 2005. In accordance with 37 C.F.R. 1.17(a)(2), authorization to charge a deposit account in the amount of $120.00 to cover this extension of time request also is submitted herewith.

The objection to the drawings is respectfully traversed. Specifically, Figure 2 has been amended to more clearly identify a diameter of the ferrule 60 with the reference "D_3". Additionally, Figure 2 has been amended to illustrate an exemplary air source 200, as described in the specification. The detailed description has been appropriately amended herein to reflect the addition of the air source 200. No new matter has been added. For the reasons set forth above, Applicants respectfully request the objections to the drawings be withdrawn.

The objection to Claim 17 due to informalities is respectfully traversed. Specifically, Claim 17 has been amended to include a period. It is submitted that this amendment corrects an obvious typographical error and does not affect the scope of the claims. Applicants therefore request that the objection to Claim 17 be withdrawn.

The rejection of Claims 13 and 15-17 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,866,413 (Sturgess) is respectfully traversed.

Sturgess describes an air blast fuel atomizer 1 for a gas turbine engine wherein fuel is atomized by discharging a swirling film of fuel into a swirling annular air stream of primary air. To facilitate initial engine operation, primer fuel is atomized in a throat 14 of a venture

tube 15 through which an air stream is flowing. The atomized primer fuel and air are discharged from the venture tube 15 into the swirling stream of primary air (disposed within the swirling film of secondary fuel) to provide a combustible fuel-air mixture for creating a pilot combustion zone 26.

Claim 13 recites a combustion system for a gas turbine engine, wherein the combustion system comprises "a combustor comprising a dome assembly and a combustor liner extending downstream from said dome assembly, said combustor liner defining a combustion chamber therein, said combustor further comprising a centerline axis...a combustor casing extending around said combustor...and a primer nozzle extending axially through said combustor casing and said dome assembly for supplying fuel into said combustor along said combustor centerline axis during engine start-up operating conditions, said primer nozzle having an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

Sturgess does not describe or suggest a combustion system as is recited in Claim 13. Specifically, Sturgess does not describe nor suggest a combustion system including a primer nozzle having an inlet coupled to a source of pressurized air. Rather, Sturgess describes an air blast fuel atomizer having a tube for delivering fuel to a throat of a venturi, but does not describe nor suggest that the tube is coupled to a source of pressurized air. Accordingly, Sturgess does not describe or suggest a combustion system including a primer nozzle having an inlet coupled to a source of pressurized air. For at least the reasons above, Claim 13 is submitted to be patentable over Sturgess.

Claims 15-17 depend from independent Claim 13. When the recitations of Claims 15-17 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claims 15-17 likewise are patentable over Sturgess.

For at least the reasons set forth above, Applicants request that the Section 102 rejection of Claims 13 and 15-17 as being anticipated by Sturgess be withdrawn.

The rejection of Claims 13 and 15-18 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,530,223 (Dodds) is respectfully traversed.

Dodds describes a combustor 10 for a gas turbine engine. The combustor 10 has a longitudinal axis 12 extending therethrough and also includes an outer liner 14, an inner liner 16, a first dome 18 that is formed upstream of outer liner 14 and defines a first combustion zone 20 that is oriented obliquely to the longitudinal axis 12. Combustor 20 also includes a dome plate 22 connected to the first dome 18 and the inner liner 16. A second combustion zone 24 is defined by the dome plate 22, the outer liner 16, and the inner liner 14 and is orientated substantially perpendicular to the first combustion zone 20.

Claim 13 recites a combustion system for a gas turbine engine, wherein the combustion system comprises "a combustor comprising a dome assembly and a combustor liner extending downstream from said dome assembly, said combustor liner defining a combustion chamber therein, said combustor further comprising a centerline axis...a combustor casing extending around said combustor...and a primer nozzle extending axially through said combustor casing and said dome assembly for supplying fuel into said combustor along said combustor centerline axis during engine start-up operating conditions, said primer nozzle having an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

Dodds does not describe or suggest a combustion system as is recited in Claim 13. Specifically, Dodds does not describe nor suggest a combustion system including a primer nozzle having an inlet coupled to a source of pressurized air. Rather, Dodds describes a combuster for a gas turbine engine that includes an elongated fuel stem 100 having a fuel inlet 114 that is connected only to a fuel source. Accordingly, Dodds does not describe or suggest a combustion system including a primer nozzle having an inlet coupled to a source of pressurized air. For at least the reasons above, Claim 13 is submitted to be patentable over Dodds.

Claims 15-18 depend from independent Claim 13. When the recitations of Claims 15-18 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claims 15-18 likewise are patentable over Dodds.

For at least the reasons set forth above, Applicants request that the Section 102 rejection of Claims 13 and 15-18 as being anticipated by Dodds be withdrawn.

The rejection of Claims 13, 15, and 16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,034,297 (Orchard) is respectfully traversed.

Orchard describes a combustion chamber for a direct lift engine. The combustion chamber includes at least three concentric annular partitions 24, 25, and 26 extending from an inlet of the chamber along the axial length of the chamber. The partitions divide the combustion chamber into at least four passages 27, 28, 29, and 30. An innermost passage 27 and an outwardly alternate passage 29 are shaped to channel air therethrough from the inlet with a swirling motion around an axis of the chamber such that the velocity is substantially unchanged.

Claim 13 recites a combustion system for a gas turbine engine, wherein the combustion system comprises "a combustor comprising a dome assembly and a combustor liner extending downstream from said dome assembly, said combustor liner defining a combustion chamber therein, said combustor further comprising a centerline axis...a combustor casing extending around said combustor...and a primer nozzle extending axially through said combustor casing and said dome assembly for supplying fuel into said combustor along said combustor centerline axis during engine start-up operating conditions, said primer nozzle having an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

Orchard does not describe or suggest a combustion system as is recited in Claim 13. Specifically, Orchard does not describe nor suggest a combustion system including a primer nozzle having an inlet coupled to a source of pressurized air. Rather, Orchard describes a combustion chamber having burners 33 and 34 for delivering fuel into the chamber, but does

not describe nor suggest that the burners are coupled to a source of pressurized air. Accordingly, for at least the reasons above, Claim 13 is submitted to be patentable over Orchard.

Claims 15 and 16 depend from independent Claim 13. When the recitations of Claims 15 and 16 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claims 15 and 16 likewise are patentable over Orchard.

For at least the reasons set forth above, Applicants request that the Section 102 rejection of Claims 13, 15, and 16 as being anticipated by Orchard be withdrawn.

The rejection of Claim 7 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,446,439 (Kraft) is respectfully traversed.

Kraft describes a fuel nozzle system for use in a combustor for reducing nitrogen oxides and other pollutants. The fuel nozzle system includes an annular fuel distribution manifold 16 that is mounted a distance away from a diffusion nozzle 20. The annular manifold 16 includes a plurality of fuel emitting passages or holes 32 disposed along the manifold 16. The manifold 16 is mounted a distance away from the diffuser nozzle 20 to allow air to stream around the manifold 16 to facilitate mixing fuel and air, thus enhancing premixing in the combustion chamber.

Claim 7 recites a primer nozzle for a gas turbine engine combustor including a centerline axis, wherein the primer nozzle comprises "an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

Kraft does not describe or suggest a primer nozzle as is recited in Claim 7. Specifically, Kraft does not describe nor suggest a primer nozzle having an inlet coupled to a source of pressurized air. Rather, Kraft describes a fuel nozzle system having a fuel supply tube 39 that is only coupled to a fuel source. Accordingly, Kraft does not describe or suggest a primer nozzle having an inlet coupled to a source of pressurized air. For at least the reasons above, Claim 7 is submitted to be patentable over Kraft.

For at least the reasons set forth above, Applicants request that the Section 102 rejection of Claim 7 as being anticipated by Kraft be withdrawn.

The rejection of Claims 13, 15, and 16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,283,502 (Lefebvre) is respectfully traversed.

Lefebvre describes a fuel injection system for a gas turbine engine. The system includes an atomizing plate 12 that is located in a duct 7 leading to a combustion chamber 11. The plate 12 directs a stream of combustion gases over a periphery of the plate. A pilot fuel injector 10 is mounted in, or near, a mouth of the duct to direct fuel droplets into the combustion chamber.

Claim 13 recites a combustion system for a gas turbine engine, wherein the combustion system comprises "a combustor comprising a dome assembly and a combustor liner extending downstream from said dome assembly, said combustor liner defining a combustion chamber therein, said combustor further comprising a centerline axis...a combustor casing extending around said combustor...and a primer nozzle extending axially through said combustor casing and said dome assembly for supplying fuel into said combustor along said combustor centerline axis during engine start-up operating conditions, said primer nozzle having an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

Lefebvre does not describe or suggest a combustion system as is recited in Claim 13. Specifically, Lefebvre does not describe nor suggest a combustion system including a primer nozzle having an inlet coupled to a source of pressurized air. Rather, Lefebvre describes a fuel injection system having a pilot fuel injector 10 but does not describe nor suggest that the pilot fuel injector is coupled to a source of pressurized air. Accordingly, for at least the reasons above, Claim 13 is submitted to be patentable over Lefebvre.

Claims 15 and 16 depend from independent Claim 13. When the recitations of Claims 15 and 16 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claims 15 and 16 likewise are patentable over Lefebvre.

For at least the reasons set forth above, Applicants request that the Section 102 rejection of Claims 13, 15, and 16 as being anticipated by Lefebvre be withdrawn.

The rejection of Claims 7, 8, 10-13, and 15-20 under 35 U.S.C. § 103(a) as being unpatentable over Lefebvre in view of any of U.S. Patent No. 4,362,022 (Faucher), U.S. Patent No. 5,361,578 (Donlan), and U.S. Patent No. 4,229,944 (Weiler) is respectfully traversed.

Lefebvre is described above. Faucher describes an anti-coke fuel nozzle 10. The nozzle 10 directs air at an increased pressure into a secondary passage 14 of the nozzle 10 during an inoperative mode of the secondary passage 14, and during predefined operations of a primary fuel passage 12 to prevent coke from forming in the secondary passage 14.

Donlan describes a fuel nozzle assembly 11 that may operate using either gaseous or liquid fuel, or both simultaneously, along with steam injection. The nozzle 11 includes inner and outer concentric annular conduits 18 and 19 for directing the flow of gaseous fuel and steam from the fuel and steam inlet ports 16 and 17 to outlet ports 31. Radial passages 40 in a nozzle body 14 enable cooling air to flow over an oil nozzle 38 and through an oil outlet port 30, thus preventing coking at the nozzle tip.

Weiler describes a fuel injection nozzle assembly 1 for gas turbine drives. The nozzle assembly 1 is mounted in a structural part 9 forming an outer housing 4 of the combustion chamber of the gas turbine. Moreover, nozzle assembly 1 extends into a primary zone thereof. To prevent carbonizing of the nozzle 1, the nozzle includes cooling passages 7 and 8 that extend longitudinally therein and are in flow communication with a source of cooling air. The injection nozzle 1 includes a central body 18 having a fuel supply passage therein and an outer shielding member 17 that is positioned such that the cooling air passage is defined between the outer shielding member 17 and the central body 18. The central body 18 is formed of material having the high thermal conductivity of copper while the outer shielding member 17is formed of a material having the high temperature resistivity and low thermal conductivity of nickel alloys.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Lefebvre, Faucher, Donlan, nor Weiler, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Lefebvre, Faucher, Donlan, and Weiler, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck , 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Moreover, if art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v.

S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited, as a whole, is not suggestive of the presently claimed invention. Accordingly, for at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection be withdrawn.

Moreover, and to the extent understood, no combination of Lefebvre, Faucher, Donlan, and Weiler describes nor suggests the claimed combination and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 7 recites a primer nozzle for a gas turbine engine combustor including a centerline axis, wherein the primer nozzle comprises, among other things, "an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

As discussed above, Lefebvre does not describe or suggest a primer nozzle having an inlet coupled to a source of pressurized air. Additionally, none of Faucher, Donlan, and Weiler describe or suggest a primer nozzle having an inlet coupled to a source of pressurized air. Rather, in contrast to the present invention, Weiler describes that a fuel injection nozzle can be connected with outside air or with a fuel tank that is vented to the outside air. For at least the reasons above, Claim 7 is submitted to be patentable over Lefebvre in view of any of Faucher, Donlan, and Weiler.

Claims 8 and 10-12 depend from independent Claim 7. When the recitations of Claims 8 and 10-12 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claims 8 and 10-12 likewise are patentable over Lefebvre in view of any of Faucher, Donlan, and Weiler.

Claim 13 recites a combustion system for a gas turbine engine, wherein the combustion system comprises "a combustor comprising a dome assembly and a combustor liner extending downstream from said dome assembly, said combustor liner defining a combustion chamber therein, said combustor further comprising a centerline axis...a combustor casing extending around said combustor...and a primer nozzle extending axially through said combustor casing and said dome assembly for supplying fuel into said combustor along said combustor centerline axis during engine start-up operating conditions,

said primer nozzle having an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

As discussed above, none of Lefebvre, Faucher, Donlan, or Weiler, considered alone or in combination, describes or suggests a primer nozzle having an inlet coupled to a source of pressurized air. Rather, in contrast to the present invention, Weiler describes that a fuel injection nozzle can be connected with outside air or with a fuel tank that is vented to the outside air. For at least the reasons above, Claim 13 is submitted to be patentable over Lefebvre in view of any of Faucher, Donlan, and Weiler.

Claims 15-20 depend from independent Claim 13. When the recitations of Claims 15-20 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claims 15-20 likewise are patentable over Lefebvre in view of any of Faucher, Donlan, and Weiler.

For at least the reasons set forth above, Applicants request that the Section 103 rejection of Claims 7, 8, 10-13, and 15-20 be withdrawn.

The rejection of Claims 7, 8, 10-13, and 15-20 under 35 U.S.C. § 103(a) as being unpatentable over Sturgess in view of any of Faucher, Donlan, and Weiler is respectfully traversed.

Lefebvre, Faucher, Donlan, and Weiler are described above.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Lefebvre, Faucher, Donlan, nor Weiler, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Lefebvre, Faucher, Donlan, and Weiler, because there is no motivation to combine the references

suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck , 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Moreover, if art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited, as a whole, is not suggestive of the presently claimed invention. Accordingly, for at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection be withdrawn.

Moreover, and to the extent understood, no combination of Lefebvre, Faucher, Donlan, and Weiler describes nor suggests the claimed combination and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 7 recites a primer nozzle for a gas turbine engine combustor including a

centerline axis, wherein the primer nozzle comprises, among other things, "an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

As discussed above, Sturgess does not describe or suggest a primer nozzle having an inlet coupled to a source of pressurized air. Additionally, none of Faucher, Donlan, and Weiler describe nor suggest a primer nozzle having an inlet coupled to a source of pressurized air. Rather, in contrast to the present invention, Weiler describes that a fuel injection nozzle can be connected with outside air or with a fuel tank that is vented to the outside air. For at least the reasons above, Claim 7 is submitted to be patentable over Sturgess in view of any of Faucher, Donlan, and Weiler.

Claims 8 and 10-12 depend from independent Claim 7. When the recitations of Claims 8 and 10-12 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claims 8 and 10-12 likewise are patentable over Sturgess in view of any of Faucher, Donlan, and Weiler.

Claim 13 recites a combustion system for a gas turbine engine, wherein the combustion system comprises "a combustor comprising a dome assembly and a combustor liner extending downstream from said dome assembly, said combustor liner defining a combustion chamber therein, said combustor further comprising a centerline axis...a combustor casing extending around said combustor...and a primer nozzle extending axially through said combustor casing and said dome assembly for supplying fuel into said combustor along said combustor centerline axis during engine start-up operating conditions, said primer nozzle having an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

As discussed above, none of Sturgess, Faucher, Donlan, or Weiler, considered alone or in combination, describes nor suggests a primer nozzle having an inlet coupled to a source of pressurized air. Rather, in contrast to the present invention, Weiler describes that a fuel injection nozzle can be connected with outside air or with a fuel tank that is vented to the

outside air. For at least the reasons above, Claim 13 is submitted to be patentable over Sturgess in view of any of Faucher, Donlan, and Weiler.

Claims 15-20 depend from independent Claim 13. When the recitations of Claims 15-20 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claims 15-20 likewise are patentable over Sturgess in view of any of Faucher, Donlan, and Weiler.

For at least the reasons set forth above, Applicants request that the Section 103 rejection of Claims 7, 8, 10-13, and 15-20 be withdrawn.

The rejection of Claim 9 under 35 U.S.C. § 103(a) as being unpatentable over either Lefebvre or Sturgess in view of any of Faucher, Donlan, and Weiler and further in view of either U.S. Patent No. 6,675,581 (Stuttaford) or U.S. Patent No. 6,363,724 (Bechtel) is respectfully traversed.

Lefebvre, Faucher, Donlan, and Weiler are described above. Stuttaford describes a premix fuel nozzle and method of operation for use in a gas turbine combustor. The premix fuel nozzle utilizes a fin assembly comprising a plurality of radially extending fins for injection of fuel and pressurized air in order to provide a more uniform injection pattern. The fuel and pressurized air mixes upstream of the combustion chamber and flows into the combustion chamber as a homogeneous mixture. The premix fuel nozzle includes a plurality of coaxial passages, which provide fuel and pressurized air to the fin assembly, as well as pressurized air to cool the nozzle cap assembly.

Bechtel describes a diffusion flame nozzle gas tip to convert a dual fuel nozzle to a gas only nozzle. The nozzle tip diverts compressor discharge air from the passage feeding the diffusion nozzle air swirl vanes to a region vacated by removal of the dual fuel components, so that the diverted compressor discharge air can flow to and through effusion holes in the end cap plate of the nozzle tip.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by

combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Sturgess, Lefebvre, Faucher, Donlan, Weiler, Stuttaford, nor Bechtel, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Sturgess, Lefebvre, Faucher, Donlan, Weiler, Stuttaford, and Bechtel, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck , 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Moreover, if art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard,

it is respectfully submitted that the cited, as a whole, is not suggestive of the presently claimed invention. Accordingly, for at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection be withdrawn.

Moreover, and to the extent understood, no combination of Sturgess, Lefebvre, Faucher, Donlan, Weiler, Stuttaford, and Bechtel describes nor suggests the claimed combination and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 9 depends from independent Claim 7, which recites a primer nozzle for a gas turbine engine combustor including a centerline axis, wherein the primer nozzle comprises, among other things, "an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

As discussed above, none of Sturgess, Lefebvre, Faucher, Donlan, nor Weiler, considered alone or in combination, describe or suggest a primer nozzle having an inlet coupled to a source of pressurized air. Additionally, neither Stuttaford nor Bechtel, considered alone or in combination, describes or suggests a primer nozzle having an inlet coupled to a source of pressurized air. For at least the reasons above, Claim 7 is submitted to be patentable over Sturgess or Lefebvre in view of any of Faucher, Donlan, and Weiler, and further in view of either Stuttaford or Bechtel.

Claim 9 depends from independent Claim 7. When the recitations of Claim 9 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claim 9 likewise is patentable over Sturgess or Lefebvre in view of any of Faucher, Donlan, and Weiler, and further in view of either Stuttaford or Bechtel.

For at least the reasons set forth above, Applicants request that the Section 103 rejection of Claim 9 be withdrawn.

The rejection of Claim 14 under 35 U.S.C. § 103(a) as being unpatentable over any of Lefebvre, Sturgess, Faucher, Donlan, Weiler, Stuttaford, or Bechtel in view of either U.S. Patent No. 2,259,958 (Owner) or U.S. Patent No. 3,116,606 (Dougherty) is respectfully traversed.

Lefebvre, Faucher, Donlan, Weiler, Stuttaford, and Bechtel are described above. Owner describes means for supporting a gas turbine power-plant that is attached to the power-plant at positions spaced along the length thereof. A portion of the plant is supported cantileverwise of the means and another portion is supported between the attachments.

Dougherty describes a combustion can support for supporting the forward end of the combustion can prior to insertion of a fuel nozzle. The support eliminates the usual supports at the rear of the can and thereby renders the can lighter and cheaper to manufacture.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Sturgess, Lefebvre, Faucher, Donlan, Weiler, Stuttaford, Bechtel, Owner, nor Dougherty, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Sturgess, Lefebvre, Faucher, Donlan, Weiler, Stuttaford, Bechtel, Owner, and Dougherty because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck , 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose

among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is clearly based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention.

Moreover, if art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited, as a whole, is not suggestive of the presently claimed invention. Accordingly, for at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection be withdrawn.

Moreover, and to the extent understood, no combination of Sturgess, Lefebvre, Faucher, Donlan, Weiler, Stuttaford, Bechtel, Owner, and Dougherty describes nor suggests the claimed combination and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 14 depends from independent Claim 13, which recites a combustion system for a gas turbine engine, wherein the combustion system comprises "a combustor comprising a dome assembly and a combustor liner extending downstream from said dome assembly, said combustor liner defining a combustion chamber therein, said combustor further comprising a centerline axis...a combustor casing extending around said combustor...and a primer nozzle extending axially through said combustor casing and said dome assembly for supplying fuel into said combustor along said combustor centerline axis during engine start-up operating conditions, said primer nozzle having an inlet coupled to a source of pressurized air for purging residual fuel into the combustor from said nozzle during pre-determined combustor operating conditions."

As discussed above, none of Sturgess, Lefebvre, Faucher, Donlan, Weiler, Stuttaford, nor Bechtel, considered alone or in combination, describe or suggest a primer nozzle having an inlet coupled to a source of pressurized air. Additionally, neither Owner nor Dougherty,

considered alone or in combination, describes or suggests a primer nozzle having an inlet coupled to a source of pressurized air. For at least the reasons above, Claim 7 is submitted to be patentable over any of Sturgess, Lefebvre, Faucher, Donlan, Weiler, Stuttaford, or Bechtel in view of either Owner or Dougherty.

Claim 14 depends from independent Claim 13. When the recitations of Claim 14 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claim 14 likewise is patentable over any of Sturgess, Lefebvre, Faucher, Donlan, Weiler, Stuttaford, or Bechtel in view of either Owner or Dougherty.

For at least the reasons set forth above, Applicants request that the Section 103 rejection of Claim 14 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,

Robert B. Reeser III
Registration No. 45,548
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, MO 63102-2740
(314) 621-5070

IN THE DRAWINGS:

Applicants respectfully request approval of the following drawing changes:

Figure 2 has been amended to move the reference "D3" to properly indicate a diameter of the ferrule 60; and

Figure 2 has been amended to show an air source 200, as recited in Claims 12 and 20.

No new matter has been added by the proposed drawing changes. Submitted herewith is a Replacement Sheet including the above-referenced changes to Figure 2.